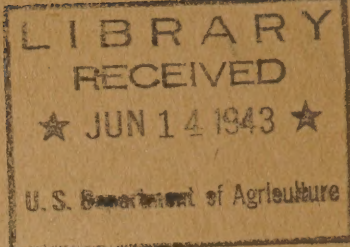


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United States Department of Agriculture
U.S. EXTENSION SERVICE
Washington, D. C.



DUSTING AN AID IN PRODUCING MORE PEANUTS

By raising more bushels per acre, growers of peanuts can help to make up for the fact that the planted acreage has fallen short of the 1943 goal. According to Department estimates the acreage to be harvested for nuts is likely to fall considerably below the announced production goal of 5,500,000 acres. However, there is good evidence that by following the best cultural practices, including dusting for control of diseases and insects, growers can largely make up for fewer acres by getting more peanuts from the acreage planted.

Sulfur Dusting Increases Yield of Nuts and Hay

Results of dusting trials in 7 Georgia peanut-growing counties from 1937 to 1940 show an average increase of 19 percent or 330 pounds of nuts per acre. Tests on 43 farms in 1941 showed increased yields of 326 pounds per acre.

In extensive North Carolina tests, 1937 to 1940, sulfur boosted yields of nuts nearly 13 percent, or 260 pounds, and yields of hay 25 percent, or 584 pounds. In 1941 yields of nuts were increased by 349 pounds and of hay by 647 pounds. In 1942 similar results were obtained.

In Virginia the results of experiments conducted on 70 farms from 1938 to 1941 show increases in yields of nuts ranging from 238 to 834 (av. 481) pounds per acre, and increases in hay ranging from 526 to 3,419 (av. 1,674) pounds per acre.

Very little experimental work on dusting peanuts has been conducted in other States, but there is every reason to feel sure that, especially in older peanut sections, disease and insect control will give increased yields similar to those described above.

Leaf Diseases and Insects

Leaf spots caused by fungi are common, especially in older peanut areas. They are usually well controlled by timely applications of either sulfur or sulfur-copper dusts. Newer areas, especially those farther west, have less trouble, but as time goes on the losses from leaf spots are likely to increase. The percentage of crops destroyed has been estimated for 1942 as follows: Arkansas 10, Georgia 25, North Carolina 20, Oklahoma 5, South Carolina 1, Texas 1, and Virginia 25. It takes only a few spots on a leaf to cause it to fall. Affected plants may lose most of their leaves before harvest time, thereby lowering yields.

The small, active, green leafhopper, commonly known as the potato leafhopper, is the principal peanut insect controlled by dusting. These

sucking insects feed on the leaves, dwarf and yellow the foliage, burn leaf tips and edges, and decrease yields of hay and nuts materially.

Dusting Materials and Methods

The following general recommendations are based largely on experiment station work in Virginia, North Carolina, and Georgia, and on information supplied by the War Service Committee of Southern Plant Pathologists.

Dusting Materials: Under average conditions, use sulfur dust not coarser than 93 percent 325-mesh. This is available under several trade names.

(Note: A sulfur dust containing 3 to 6 percent copper, derived from either basic copper sulfate or yellow copper oxide, will give better control of leaf spot, but the mixture is more expensive and copper is scarce owing to the war. Likewise, a dust containing 25 percent pyrethrum and 75 percent sulfur will control leafhoppers better than sulfur alone, but the peanut crop is one on which pyrethrum is not permitted this year.)

Dust Equipment: Two, four, or six-row tractor or horse-drawn dusting equipment is preferable if more than an acre or so is to be dusted. The equipment should be in good operating condition and fitted with a short canvas hood which will permit effective dusting even under slightly windy conditions.

When to Dust: Make the first application from 60 to 65 days after planting. This will usually be between June 15 and July 10. Make two to three later applications at as nearly 14-day intervals as weather conditions will permit. If weather conditions are abnormally wet, a total of four applications will be profitable; if normal to dry, three applications will usually give maximum results. Dusting should be done when the air is still. Usually the best time is early morning or late afternoon or evening. Sulfur dusts are irritating to the eyes. Well-fitting goggles will help protect them.

Amount of Dust To Apply: With good dusting equipment the rate of application of the dusts per acre should range from about 15 to 20 pounds per acre for each application, totaling approximately 65 pounds per acre in 4 applications, and 50 pounds in 3. If dust should be washed off by rain within a few hours after its application, another dusting should be given promptly.

Dusted peanuts remain green longer than undusted. Therefore digging should be delayed 5 to 10 days later than normal.

Spraying Instead of Dusting

Some peanut growers may have power sprayers available but no dusting equipment. Although dusting is preferable, a worth-while degree of insect and disease control can be obtained by spraying with 4-4-50 bordeaux mixture. Three applications of bordeaux mixture will require about 250 gallons per acre.

Sulfur Dusting Should Be Profitable

Dusting sulfur will probably sell for about 3 1/2 cents and copper-sulfur mixtures for about 5 1/2 cents per pound on a ton basis in 1943. This would make the per acre cost of dust, at 65 pounds for the season, about \$2.28 with sulfur alone and about \$3.58 with the sulfur-copper. Whenever conditions favor disease and insect damage, good profits may be expected from timely dusting.

Prepared in
U. S. Department of Agriculture.
Extension Service; Office of
Experiment Stations; Bureau of
Entomology and Plant Quarantine;
Bureau of Plant Industry, Soils, and
Agricultural Engineering; and Agricultural
Adjustment Administration.

May 17, 1943

JUN 14 1943

